

Docket Number		4-127-1027B/D1C1
FILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10		
EV 042343240 US		October 22, 2001
Express Mail Label Number		Date of Deposit

10/052879  
10/22/01  
Jc872 U.S. PTO

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

MURRAY ET AL.

APPLICATION NO: TO BE ASSIGNED

FILED: OCTOBER 22, 2001

FOR: METHODS FOR USE OF MPL LIGANDS WITH PRIMITIVE HUMAN  
STEM CELLS

Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This paper is being filed within three months of the filing date of the application. Therefore, no fees are required. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 19-0134. A duplicate of this paper is enclosed.

In accordance with 37 C.F.R. §1.56, applicants wish to call the Examiner's attention to the references cited on the attached form(s) PTO-1449. The listed references are of record in parent Application No. 09/328,188 filed June 8, 1999, and copies are available therein in accordance with 37 C.F.R. §1.98(d). However, applicants are willing to send copies of any or all of these references at the Examiner's request.

This Information Disclosure Statement is not intended as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one of the above references constitutes prior art to the present application within the meaning of 35 U.S.C. §102.

FORM PTO-1449  
(REV. 7-85)

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.  
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October 22, 2001

Sheet 1 of 3

Group 3  
c072 U.S. PTO  
10/052879  
10/22/01

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA	4,714,680	12/22/87	Civin, C.I.			2/6/84
	AB	5,061,620	10/29/91	Tsukamoto, et al.			3/30/90
	AC	5,147,784	9/15/92	Peault, B.			4/12/90
	AD	5,728,581	3/17/98	Schwartz, et al.			6/7/95
	AE	5,989,537	11/23/99	Holly, et al.			6/7/95
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AM	WO 92/11355	7/9/92	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AN	WO 95/03693	2/9/95	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AO	WO 95/21626	8/17/95	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AP	WO 96/40876	12/19/96	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AQ						<input type="checkbox"/>	<input type="checkbox"/>

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent pages, Etc.)

	AR	Baum, et al., "Isolation of a Candidate Human Hematopoietic Stem-Cell Population," <u>Proc. Natl. Acad. Sci., USA</u> , 89:2804-2808 (April 1992)
	AS	Bartley, et al., "Identification and Cloning of a Megakaryocyte Growth and Development Factor that is a Ligand for the Cytokine Receptor Mpl," <u>Cell</u> , 77:1117-1124 (July 1, 1994)
	AT	Berenson, et al., "Engraftment After Infusion of CD34 <sup>+</sup> Marrow Cells in Patients with Breast Cancer or Neuroblastoma," <u>Blood</u> , 77(8):1717-1722 (April 15, 1991)

EXAMINER	DATE CONSIDERED
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\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

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AA	Bruno, et al., <u>Blood</u> , 86(10):Abstract 1449 (1995)
AB	Chen, et al., "Engraftment of Human Hematopoietic Precursor Cells with Secondary Transfer Potential in SCID-hu Mice," <u>Blood</u> , 84(8):2497-2505 (October 15, 1994)
AC	Choi, et al., "Platelets Generated In Vitro From Proplatelet-Displaying Human Megakaryocytes are Functional," <u>Blood</u> , 85(2):402-413 (January 15, 1995)
AD	Craig, et al., "Expression of Thy-1 on Human Hematopoietic Progenitor Cells," <u>J. Exp. Med.</u> , 177:1331-1342 (May 1993)
AE	Debili, et al., "The mpl Receptor is Expressed in the Megakaryocytic Lineage from Late Progenitors to Platelets," <u>Blood</u> , 85(2):391-401 (January 15, 1995)
AF	de Sauvage, et al., "Stimulation of Megakaryocytopoiesis and Thrombopoiesis by the c-mpl Ligand," <u>Nature</u> , 369:533-538 (June 16, 1994)
AG	de Sauvage, et al., "Physiological Regulation of Early and Late Stages of Megakaryocytopoiesis by Thrombopoietin," <u>Journal of Experimental Medicine</u> , 183:651-656 (February 1, 1996)
AH	Eck, et al., "Gene-Based Therapy," in Goodman & Gilman's <u>The Pharmacological Basis of Therapeutics</u> , McGraw-Hill: New York, Ninth Edition, pp. 77-101 (1996)
AI	Gurney, et al., "Thrombocytopenia in c-mpl-Deficient Mice," <u>Science</u> , 265:1445-1447 (September 1994)
AJ	Jorgensen, et al., <u>Blood</u> , 84(10):Abstract 1301 (1994)
AK	Kaushansky, et al., "Thrombopoietin Expands Erythroid Progenitors, Increases Red Cell Production, and Enhances Erythroid Recovery After Myelosuppressive Therapy," <u>J. Clin. Invest.</u> , 96:1683-1687 (1995)
AL	Kaushansky, et al., "Promotion of Megakaryocyte Progenitor Expansion and Differentiation by the c-Mpl Ligand Thrombopoietin," <u>Nature</u> , 369:568-571 (1994)
AM	Kaushansky, et al., "The mpl Ligand: Molecular and Cellular Biology of the Critical Regulator of Megakaryocyte Development," <u>Stem Cells</u> , 12:91-97 (1994)
AN	Lok, et al., "The Structure, Biology and Potential Therapeutic Applications of Recombinant Thrombopoietin," <u>Stem Cells</u> , 12:586-598 (November 1994)

**EXAMINER**

**DATE CONSIDERED**

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AA	Lu, et al., "High Efficiency Retroviral Mediated Gene Transduction into Single Isolated Immature and Replatable CD34(3+) Hematopoietic Stem/Progenitor Cells from Human Umbilical Cord Blood," <u>Journal of Experimental Medicine</u> , 178:2089-2096 (December 1993)
AB	Mitani, et al., "Transduction of Human Bone Marrow by Adenoviral Vector," <u>Human Gene Therapy</u> , 5:941-948 (August 1994)
AC	Murray, et al., "Analysis of Human Hematopoietic Stem Cell Populations," <u>Blood Cells</u> , 20:364-370 (1994)
AD	Murray, et al., "Enrichment of Human Hematopoietic Stem Cell Activity in the CD34 <sup>+</sup> Thy-1 <sup>+</sup> Lin Subpopulation from Mobilized Peripheral," <u>Blood</u> , 85(2):368-378 (January 15, 1995)
AE	Reading, et al., Proceedings of ISEH Meeting 1994, Abstract, <u>Exp. Hematol.</u> , 22:786 (1994)
AF	Schmidt-Wolf, et al., <u>Journal of Hematotherapy</u> , 4:551-561 (1995)
AG	Spangrude, et al., "Purification and Characterization of Mouse Multipotent Hematopoietic Stem Cells," <u>Science</u> , 241:58-62 (July 1988)
AH	Spangrude, et al., "Resting and Activated Subsets of Mouse Hematopoietic Stem Cells," <u>Proc. Natl. Acad. Sci. USA</u> , 7433-7437 (October 1990)
AI	Sutherland, et al., "Differential Sensitivity of cd34 Epitopes to Cleavage by Pastereulla Haemolytica Glycoprotease: Implications for Purification of cd34-positive Progenitor Cells," <u>Exp. Hematol.</u> , 20:590-599 (1992)
AJ	Young, et al., <u>Blood</u> , 88:1619-1631 (September 1, 1996)
AK	Zeigler, et al., "In Vitro Megakaryocytopoietic and Thrombopoietic Activity of c-mpl Ligand (TPO) on Purified Murine Hematopoietic Stem Cells," <u>Blood</u> , 84(12):4045-4052 (December 1994)
AL	
AM	
AN	

**EXAMINER**

**DATE CONSIDERED**

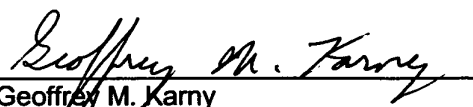
\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form(s).

Respectfully submitted,

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Date: October 22, 2001

  
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